

LISTE DE SEQUENCES

<110> Aventis CropScience S.A.

<120> Utilisation d'inhibiteurs d'HPPD comme agents de sélection dans la transformation des plantes

<140>

<141>

<160> 2

<170> PatentIn Ver. 2.1

<210> 1

<211> 5281

<212> ADN

<213> Séquence artificielle

<220>

<223> Description de la séquence artificielle: gène chimère

<400> 1

ctagtggcgc cacgcgtgat atcatgcatt ttaacatcgat tccatggcg cgccttaatt 60
aaatttaaat cagctgcatt aatgaatcgat ccaacgcgcg gggagaggcg gtttgcgtat 120
tggcgctct tcgcgttcct cgctcactga ctgcgtgcgc tcggtcgttc ggctgcggcg 180
agcggtatca gctcactcaa aggcggtaat acggttatcc acagaatcgat gggataacgc 240
aggaaagaac atgtgagcaa aaggccagca aaaggccagg aaccgtaaaa aggccgcgtt 300
gctggcggtt ttccataggc tccgcggggc tgacgagcat cacaataatc gacgctcaag 360
tcagaggtgg cgaaacccga caggactata aagataaccag gcgtttcccc ctggaaagctc 420
cctcggtgcgc tctcctgttc cgaccctgcc gcttaccggat tacctgtccg cctttctccc 480
ttcggaaagc gtggcgcttt ctcatagctc acgctgttagt tatctcagtt cggtgttagt 540
cgttcgtctcc aagctgggtt gtgtgcacga acccccccgtt cagcccgacc gctgcgcctt 600
atccggtaac tatcgctttt agtccaaccc ggtaagacac gacttatcgat cactggcagc 660
tgccactggta aacaggatta gcagagcgag gtatgttagc ggtgctacag agttcttggaa 720
gtgggtggctt aactacggctt acactagaag gacagtattt ggtatctcgat ctctgctgaa 780
gccagttacc ttccggaaaaa gagttggtag ctcttgcattt ggccaaacaaa ccaccgctgg 840
tagcggtggat tttttgtttt gcaaggcagca gattacgcgc agaaaaaaaaa gatctcaaga 900
agatccctttt atcttttcta cggggcttgcgc cgctcagtgg aacgaaaactt cacgttaagg 960
gattttggtc atgagattat caaaaaggat ctgcacccat atccctttaa attaaaaatg 1020
aagttttaaa tcaatctaaa gtatatatgc gtaaaacttgg tctgacagtt accaatgctt 1080

aatcagttag gcacccatct cagcgatctg tctatttcgt tcatccatag ttgcctgact 1140
ccccgtcgta tagataacta cgatacggga gggcttacca tctggccca gtgctgcaat 1200
gataccgcga gacccacgct caccggctcc agatttatca gcaataaaacc agccagctgg 1260
aaggcccggag cgccagaatgt gtcctgcaac tttatccgcc tccatccagt ctattaattg 1320
ttgccggaa gctagagtaa gtagttcgcc agttaatagt ttgcgcacacg ttgttgccat 1380
tgctacaggc atcgtggtgt cacgctcgac gtttggtatg gcttcattca gctccgggttc 1440
ccaaacgatca aggccggatca catgatcccc catgttgtgc aaaaaaaggcg ttagctcatt 1500
cggtcctccg atcggtgtca gaagtaagtt ggccgcagtg ttatcactca tggttatggc 1560
agcaactgcac aattctctta ctgtcatgcc atccgtaa gtaatctgt tgactggta 1620
gtactcaacc aagtcatctt gagaatagt tatgcggcga ccgagttgtc ttggcccg 1680
gtcaatacgg gataataccg cggccacatag cagaacttta aaagtgcacca tcattggaaa 1740
acgttcttcg gggcgaaaaac tctcaaggat cttaccgctg ttgagatcca gttcgatgt 1800
acccactcgat gcaccccgact gatcttcagc atctttact ttcaccagcg tttctgggt 1860
agcaaaaaaca ggaaggcataa atgcccggaaa aaagggaata agggcgacac ggaaatgtt 1920
aataactcata ctcttccttt ttcaatatta ttgaagcatt tatcagggtt attgtctcat 1980
gagcggatac atatttgaat gtatttagaa aaataaaacaa ataggggttc cgccgcacatt 2040
tccccggaaaa gtgccacctg acgcgcctg tagcggcgc ttaagcgcgg cgggtgttgt 2100
ggttacgcgc agcgtgaccg ctacacttgc cagcgccttgc ggcgcgcgc ctttcgtt 2160
cttcccttcc ttctcgccca cgttcggcgg ctttccccgt caagctctaa atcgggggt 2220
cccttaggg ttccgattta gtgtttacg gcaccccgac cccaaaaaac ttgatttaggg 2280
tgatggttca cgtgtgggc catcgccctg atagacggtt ttgcgcctt tgacgttgg 2340
gtccacgttc tttaatagt gactcttgc ccaaacttgc acaacactca accctatctc 2400
ggtctattct ttgttattt aagggtttt gccgatttgc gcctatttgt taaaaaatgt 2460
gctgatattaa caaaaaattta acgcgaattt taacaaaata ttaacgcctt caatttccat 2520
tcgcccattca ggctgcgc aa ctgtggaa gggcgatcgg tgccggccctc ttgcgttatt 2580
cgccagctgg gcaactgtt ggaaggcga tcgggtggg ccttccgtt attacgcac 2640
ctggcggaaag ggggatgtgc tgcaaggcga ttaagttggg taacgccagg gtttccca 2700
tcacgacgtt gtaaaacgac ggccagtgc ttgcggccgc aattcccgat cttagtaacat 2760
agatgacacc ggcgcgcata atttattccta gtttgcgcgc tatattttgt ttctatogc 2820
gtattaaatg tataatttgcg ggactctaat cataaaaacc catctcataa ataacgtcat 2880
gcattacatg ttaatttattt catgcttaac gtaattcaac agaaattata tgataatcat 2940
cgcaagaccc gcaacaggat tcaatcttaa gaaactttat tgccaaatgt ttgaacgcac 3000
ggggaaattt gtcgagtcac cctcgccgg gcttttgac gcttaatcgg cggtaatc 3060
accacgacgc acctggtcac gttcgatggc ctcgaacacg gccttgcgt tccactcgcc 3120
aaacccatcg tcgcccattgc gctggatgaa ttcaaggaaac accggggccca tcagggtttc 3180
cgagaagatc tgcaaggcga ggcgtttgtc gccttccacg gaagatccgt ccaggcaggat 3240
acccgcgtgcc tgcaaggatccat ccacccggctc ggcgtggcga ggcaggcggc cttcgagcat 3300
ttcgtaataa gtgtctggcg ggcgcgtcat gaagcgcacatg ccgatttct tcaacgcgtc 3360
ccaggtcttgc accaggtcgat ccgtggaa cggccacgtgc tggatgcctt cggccgttggaa 3420
ctgcattcagg aactcttcga tctgccccgc gccccttggac gactcttcgt tcagcgggat 3480
gcggatcatg cggccggcgc cactcatggc cttggaaatgc aggccgggtgt actcgccctt 3540
gatatcgaag taacgcgtt cacggaaatgtt gaaacaaatttc tcgttagaaatgtt tggcccgatgtt 3600

gaccatgcgg ccgcgataga cgttgtgggt caggtggtcg atgactttga gacctgcacc 3660
gaccggattg cgctccacac cttcgaggta cacgaagtgc atgtcgtaga tcgagctgcc 3720
ttcgccgaaa cggtcgatca ggtacaacgg cgccgcggccg atgccttgc tcgcccggcag 3780
gttcaattcc atcggcccg tgtcaatatgc gatcggctgg gcgcgcgagtt ccagggcgcg 3840
gtttaggccc ttttgcgagt ccttcacgcg gaacgcctatgc gcgcacaccg acggggcg 3900
ttcggccgca aagtaggagg cgatgcgtt gggctcggtt ttgaggatca gggtgatctc 3960
gcctggccgg tacagggtca cgttcttgc acgggtggtc gcgcacttgg tgaagcccat 4020
gatctcgaag atcggctcca gggtacccgg cgtcggcgac gcgaattcga tgaattcaaa 4080
gcacatcagg cccattgggt tttcgatatac atctgcctatgc accggatcc ttccgcctt 4140
gtgacgttg cgagggttc tggaggagcg gcggggcgacg gggaggctgg cggtggactt 4200
gagccccctgg aacggagcga cggcggtggc cgacgaggcc atcatcacgg tgggcgcacat 4260
tgacagcggc ggcaggtaac acagcgtctc gaacttcttgc ttgcgttagg cggccacac 4320
ctgcataatatac tgaactttc caccgttgctt gggaaagggtt gagaagtcgt tagccttctt 4380
ggtgtgggg aaggcggcgt tggacttaag gccggtaac ggagccacca tggcgcctt 4440
agcaggggcg gtccggctaa cggtcgcgac tgaggaggag atcgaagcca tggctgcctt 4500
gctgcctagt atgtatgtac tcgcgtcttgc ctggaaattt cgatggtcga gaatccat 4560
agtacttta gtgattatga gctgtatata taataacttgc acatgagctg cctgcacatcc 4620
aacggataaa aacaaatcta tcttaacttgc tagtatttttgc gagcgttagga tgggtggct 4680
cttggaaattt catgcatagt gtccacataa tataatttgc acatgatccat 4740
agccaccaga aatggagagc cacgtgtcaa atgcacatttgc cttaaatat cttatctcat 4800
cttctaaagg agaggttagac atggaaagggtt cggagggttgc gtgttgcatttttatcat 4860
gaggtaata gtgtgtggtt tatatttttgc atgttttgc tatcatgagc gtttggaaat 4920
ctgctaccgt aatataatgc cagatgtgtt attttttgc acatcccgt cacattgcct 4980
ataatcaaaa agattttcaa aaattaccta aaaaccatgt aaatttttgc aaacctaccg 5040
aaattctaaa aagaaaaatatacataaa atacgtgaaa actggaccaa tattaccgaa 5100
aactggacca atatgttgc gtgtgtggttgc gcccgtatttgc ataaggatgtc tagtgcattttt 5160
aatagtaagg ttggaaattt taaagcataa ataaaaaaaca aatacaaaata caaatattt 5220
aagactagaa aaattgtatc atccaagtatc tgaattatct agaggatccc cgggggatcc 5280
a 5281

<210> 2

<211> 5909

<212> ADN

<213> Séquence artificielle

<220>

<223> Description de la séquence artificielle: gène
chimère

<400> 2

ggtgtggccg gctctagagc ttgcgtgcgc gcagggtcgag gagaaatatgc agtcgaggca 60
tggatacact aagttccctt gaagtgcgttgc tgatcttgc tgctgagatgc attcccgat 120

caagatagtt tgtgctgcaa gtgacacaat tgtaatgaaa ccaccactca acgaatttac 180
tttgccgtt gacatgtcgt gtgctctgtt tgatgggtt agtgcgggtt ggtaatttatt 240
tttggtaatg tgatggtaaa acctcttatg taaataggta ctttatctat tgaagtgtgt 300
tcttggtc tatagttct caaaggaaa ttaaaatgtt gacatcccat ttacaattga 360
taacctggta tacacaaact ttgtaaattt ggtgatattt atggtcgaaa gaaggcaata 420
cccattgtat gttccaatat caatatact acgataactt gataatacta acatatgatt 480
gtcattgttt ttccagttatc aatatacatt aagctactac aaaatttagta taaatcaacta 540
tattataaat cttttcgggt tgtaacttgt aattcgtggg tttttaaat aaaagcatgt 600
gaaaattttc aaataatgtg atggcgcaat tttatttcc gagttccaaa atattgccgc 660
ttcattaccc taatttggc cgccacatgt aaaacaaaag acgattctt gtggctatca 720
ctgccatcac gcggatcaact aatatacacc gtcgattaaa acagatcgac ggtttataca 780
tcattttatt gtacacacgg atcgtatgat tgtcattgtt tttccagttat caatatacat 840
taagctacta caaaaattgt ataaatcaact atattataaa tcttttcgg ttgtaacttg 900
taattcgtgg gtttttaaaa taaaagcatg tgaaaatttt caaataatgt gatggcgca 960
tttattttc cgagttccaa aatattgccc cttcattacc ctaatttggc ggcacatg 1020
taaaaacaaa gacgattctt agtggctatc actgccccatca cgcggatcac taatataac 1080
cgtcgattaa aacagatcga cggtttatac atcattttat tgacacacg gatcgatatc 1140
tcagccgtta gatttaatat gcgatctgat tgctcaaaaa atagactctc cgtcttgc 1200
tataaaaaca atttcacatc ttttcaccc aaatctactc ttaaccgttc ttcttcttct 1260
acagacatca atttctctcg actctagaat tcgaaacaca acatatacaa aacaaacgaa 1320
tctcaagcaa tcaagcatc tacttctatt gcagcaattt aaatcatttc ttttaaagca 1380
aaagcaattt tctgaaaatt ttcaccattt acgaacgata gccatggctt cgatctcc 1440
ctcagtcgacg accgttagcc ggaccgcccc tgctcagggcc aacatggtgg ctccgttac 1500
cgcccttaag tccaaacgccc cttcccccac caccaagaag gctaacgact tctccaccc 1560
tcccagcaac ggtggaaagag ttcaatataat gcaggtgtgg cggcctacg gcaacaagaa 1620
gttcgagacg ctgtcgtacc tgccggcgt tgctatggc cccaccgtga tgatggcc 1680
gtcgccacc gccgtcgctc cggtccaggg gctcaagtcc accggccagcc tccccgtcgc 1740
ccggccgtcc tccagaagcc tcggcaacgt cagcaacggc ggaaggatcc ggtgcacggc 1800
agatctatac gaaaaccaa tggccctgat gggctttgaa ttcatcgaat tcgcgtcgcc 1860
gacgcccgggt accctggagc cgatcttcga gatcatggc ttccacaaag tcgcgaccca 1920
ccgttccaag aacgtgcacc tgtaccgcca gggcgagatc aacctgatcc tcaacaacga 1980
gccaacagc atgccttcct actttgcggc cgaacacggc cggctgggt gccggcatggc 2040
gttcccgctg aaggactcgc aaaaggccta caaccggcc ctggaaactcg gcccggc 2100
gatccatatt gacaccgggc cgatggattt gaaacctggc gcatcaagg gcatcggcgg 2160
cgcccggtt tacctgatcg accgtttcg cgaaggcagc tcgatctacg acatcgactt 2220
cgtgtaccc cttccatgtt gaaagggtgg agcgaatcc ggtcggtgc ggtctcaatggc tcatcgacca 2280
cctgacccac aacgtctatc cggccggcat ggtctactgg gccaacttct acgagaaatt 2340
gttcaacttc cgtgaagcgc gttacttcga tatcaaggc ggtacaccg gcctgacttc 2400
caaggccatg agtgcgcgg acggcatgat cggcatcccg ctgaacgaag agtgcgtccaa 2460
gggcgcgggg cagatcgaaag agttccgtat gcaaggtaac ggcaaggca tccagcactgt 2520
ggcggtccctc accgacgacc tggtaagac ctgggacgcg ttgaagaaaa tcggcatgcg 2580
cttcatgacc gggccgcag acacttatta cgaaatgctc gaaggccgcc tgcctgacca 2640

cgcgagccg gtggatcaac tgcaggcacf cggtatcctg ctggacggat cttccgtgga 2700
aggcgacaaa cgccctgctgc tgcagatctt ctcggaaacc ctgatgggcc cggtgttctt 2760
cgaattcatc cagcgcaagg gcgacgatgg gtttggcgag tggaacttca aggcgctgtt 2820
cgagtccatc gaacgtgacc aggtgcgtcg tggtgtattt accgcccattt aagcgtcaaa 2880
aagccccggcc gaggggtgact cgacgaattt ccccgatcg tcaaacaattt ggcaataaaag 2940
tttcttaaga ttgaatcctg ttgccggct tgcgatgatt atcatataat ttctgttcaa 3000
ttacgttaag catgtataaa ttaacatgtt atgcgtatgtt ttatattatgtt gatgggtttt 3060
tatgattaga gtcccgcaat tatacattt atacgcgata gaaaacaaaa tatagcgcgc 3120
aaactaggat aaattatcg gcgcgggtgc atctatgtt cttagatcggtt aattgcggcc 3180
gcaattcaact ggccgtcggtt ttacaacgtc gtgactggaa aaaccctggc gttaccac 3240
ttaatcgcc tgcagcacat ccccccggcc ccagccagct gcatataatgtt atcggccaaac 3300
gcgcggggag aggccgggttg cgtattgggc gctcttcgc ttcctcgctc actgactcgc 3360
tgcgctcggtt cggtcggtcg cggcgagcgg tatcagctca ctcaaaggcg gtaataacgg 3420
tatccacaga atcagggat aacgcaggaa agaacatgtt agcaaaaaggc cagcaaaagg 3480
ccaggaacccg taaaaaggcc gcgttgcgtgg cgttttcca taggctccgc cccctgac 3540
agcatcacaa aaatcgacgc tcaagtcaaga ggtggcgaaa cccgacagaga ctataaagat 3600
accaggcggtt tccccctgga agctccctcg tgcgctctcc tgcccgacc ctgcccgtt 3660
ccggataacct gtccgcctt ctcccttcgg gaagcgtggc gctttctcat agtcacgct 3720
gtaggtatct cagttcggtg taggtcggtc gctccaagct gggctgtgtt cacgaacccc 3780
ccgttcagcc cgaccgctgc gccttatccg gtaactatcg tttttagtcc aacccggtaa 3840
gacacgactt atcgccactg gcagctgcca ctggtaacag gattacgaga gcgaggtatg 3900
taggcgggtgc tacagagttt ttgaagtggg ggcctaacta cggttacact agaaggacag 3960
tatttggat ctgcgctctg ctgaagccag ttaccttcgg aaaaagagtt ggtagcttt 4020
gatccggcaa acaaaccacc gctggtagcg gtggttttt tgtttgcag cagcagatta 4080
cgccgagaaa aaaaggatct caagaagatc ctttgcattt ttctacgggg tctgacgctc 4140
agtggAACGA aaactcactgt taagggattt tggtcatgag attatcaaaa aggatcttca 4200
cctagatcct tttaaattaa aaatgaagtt tttaaatcaat cttaaagtata tatgagtaaa 4260
cttggctctga cagttacca tgcttaatca gtgaggcacc tatctcagcg atctgtctat 4320
ttcggttcattc catagttgcc tgactccccg tcgtgttagat aactacgata cgggagggtct 4380
taccatctgg ccccaactgtc gcaatgatac cgcgagacccc acgctcaccg gctccagatt 4440
tatcagcaat aaaccagcca gctggaaaggc ccgagcgcag aagtggctt gcaactttat 4500
ccgcctccat ccagtctatt aattgttgcc gggaaagctag agtaagtagt tggccagtt 4560
atagttgcg caacgttgc ttgcattgtca caggcatcg ggtgtcacgc tggcggttt 4620
gtatggcttc attcagatcc ggttcccaac gatcaaggcg agttacatgtt tccccatgtt 4680
tgtgcaaaaa agcggttagc tccttcggc ctccgatcg tgcagaatgtt aagttggccg 4740
cagtggttattc actcatgggtt atggcagcac tgcataattt ttttactgtc atgcccattc 4800
taagatgttt ttctgtgact ggtgagttact caaccaagtc attctgagaa tagtgtatgc 4860
ggcgaccgag ttgctctgc ccggcgtaa tacggataaa taccgcgcata catagcagaa 4920
ctttaaaatgt gctcatcatt ggaaaacgtt cttcgccggcg aaaactctca aggtatcttac 4980
cgctgttgcg atccagttcg atgtacccca ctcgtgcacc cagctgatct tcagcatctt 5040
ttactttcac cagcggttctt ggggtgagcaa aaacagggaaag gcaaaaatgcc gcaaaaaagg 5100
gaataaggc gacacggaaa tggtaatac tcataactttt ccttttcaa tattattgaa 5160

gcatttatca gggttattgt ctcatgagcg gatacatatt tgaatgtatt tagaaaaata 5220
aacaaatagg gttccgcgc acattcccc gaaaagtgcc acctgacgcg ccctgttagcg 5280
gcgcattaag cgccgggggt gtgggtgtta cgccgcagcgt gaccgctaca cttgccagcg 5340
ccctagcgcc cgctccccc gcttcttcc cttcccttct cggcacgttc gccggcttc 5400
cccgtaagg tctaaatcg gggctccctt tagggttccg atttagtgct ttacggcacc 5460
tcgaccccaa aaaacttgat tagggtgatg gttcacgtag tggccatcg ccctgataga 5520
cggttttcg cccttgacg ttggagtcca ctttcttaa tagtggactc ttgttccaaa 5580
ctggaacaac actcaaccct atctcggtct attctttga tttataaggg attttgccga 5640
tttcggccta ttggtaaaa aatgagctga ttaacaaaa atttaacgcg aattttaca 5700
aaatattaac gcttacaatt tccatcgcc attcaggctg cgcaactgtt gggaaaggcg 5760
atcggtgcgg gcctcttcgc tattacgcca gctgatcaa atttaattaa ggccgcgc 5820
tggatcgatg ttaacatgca tgatatcacy cgtggcgcca ctagtgctag cagatctggc 5880
cggccaccg gtggggccata tggggccgc 5909